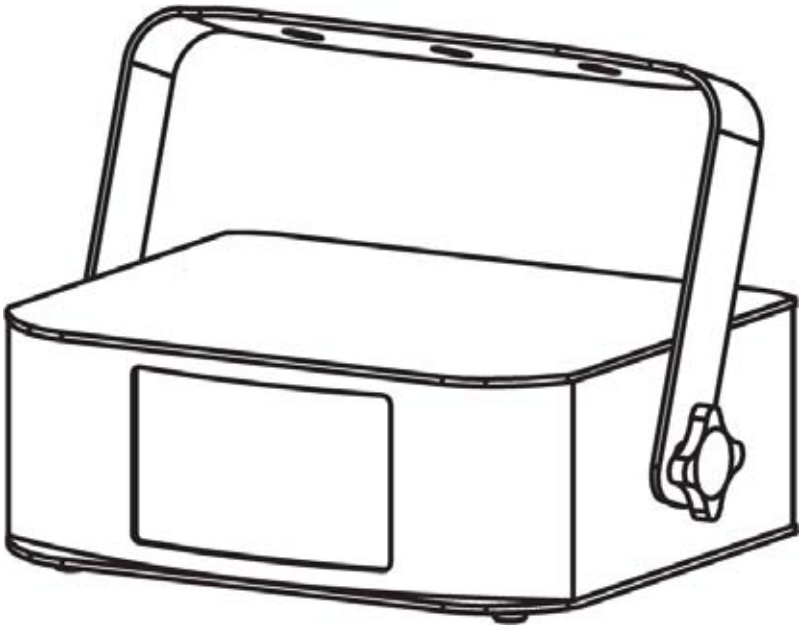
Cirrus™

LASER LIGHT
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT
CLASSIFIED PER EN/IEC 60825-1:2007
Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.



CHAUVET®
Value · Innovation · Performance
It's Green Thinking

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1. BEFORE YOU BEGIN

What is included

- 1 x Cirrus™
- 1 x Power supply (100~240 VAC, 50/60 Hz, 3A)
- 1 x Warranty Card
- 1 x User Manual

Unpacking Instructions

Immediately upon receiving a product, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a product must be returned to the factory, it is important that the product be returned in the original factory box and packing.

Manual Conventions

CHAUVET® manuals use the following conventions to differentiate certain types of information from the regular text.

CONVENTION	MEANING
[10]	A DIP switch to be configured
<Menu>	A key to be pressed on the product's control panel
1~512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified (for example, showing the operating mode/current status)
MENU > Settings	A sequence of menu options to be followed
ON	A value to be entered or selected

Icons

This manual uses the following icons to indicate information that requires special attention on the part of the user.

ICONS	MEANING
	This paragraph contains critical installation, configuration or operation information. Failure to comply with this information may render the product partially or completely inoperative, cause damage to the product or cause harm to the user.
	This paragraph contains important installation or configuration information. Failure to comply with this information may prevent the product from functioning correctly.
	This paragraph reminds you of useful, although not critical, information.

Safety Instructions

Please read the following notes carefully because they include important safety information about the installation, usage, and maintenance of this product.

- Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the product.
- This product is intended for indoor use only! To prevent risk of fire or shock, do not expose product to rain or moisture.
- Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse size and rating.
- Secure product to fastening device using a safety chain.
- Maximum ambient temperature (Ta) is 104° F (40° C). Do not operate product at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.
- Never connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.
- Lasers can be hazardous and have unique safety considerations. Permanent eye injury and blindness is possible if lasers are used incorrectly. Pay close attention to each safety REMARK and WARNING statement in the user manual. Read all instructions carefully BEFORE operating this device.

- **Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser light.**
- **This laser product can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.**
- **It is illegal and dangerous to shine this laser into audience areas, where the audience or other personnel could get direct laser beams or bright reflections into their eyes.**
- **It is a US Federal offense to shine any laser at aircraft.**
- **Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**
- **There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact the dealer nearest to you.**
- **Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser light.**

Non Interlocked Housing Warning

- This unit contains high power laser devices internally.
- Do not open the laser housing, due to potential exposure to unsafe levels of laser radiation.
- The laser power levels, accessible if the unit is opened, can cause instant blindness, skin burns, and fires.

Laser Safety Notes

STOP AND READ ALL THE LASER SAFETY NOTES BELOW

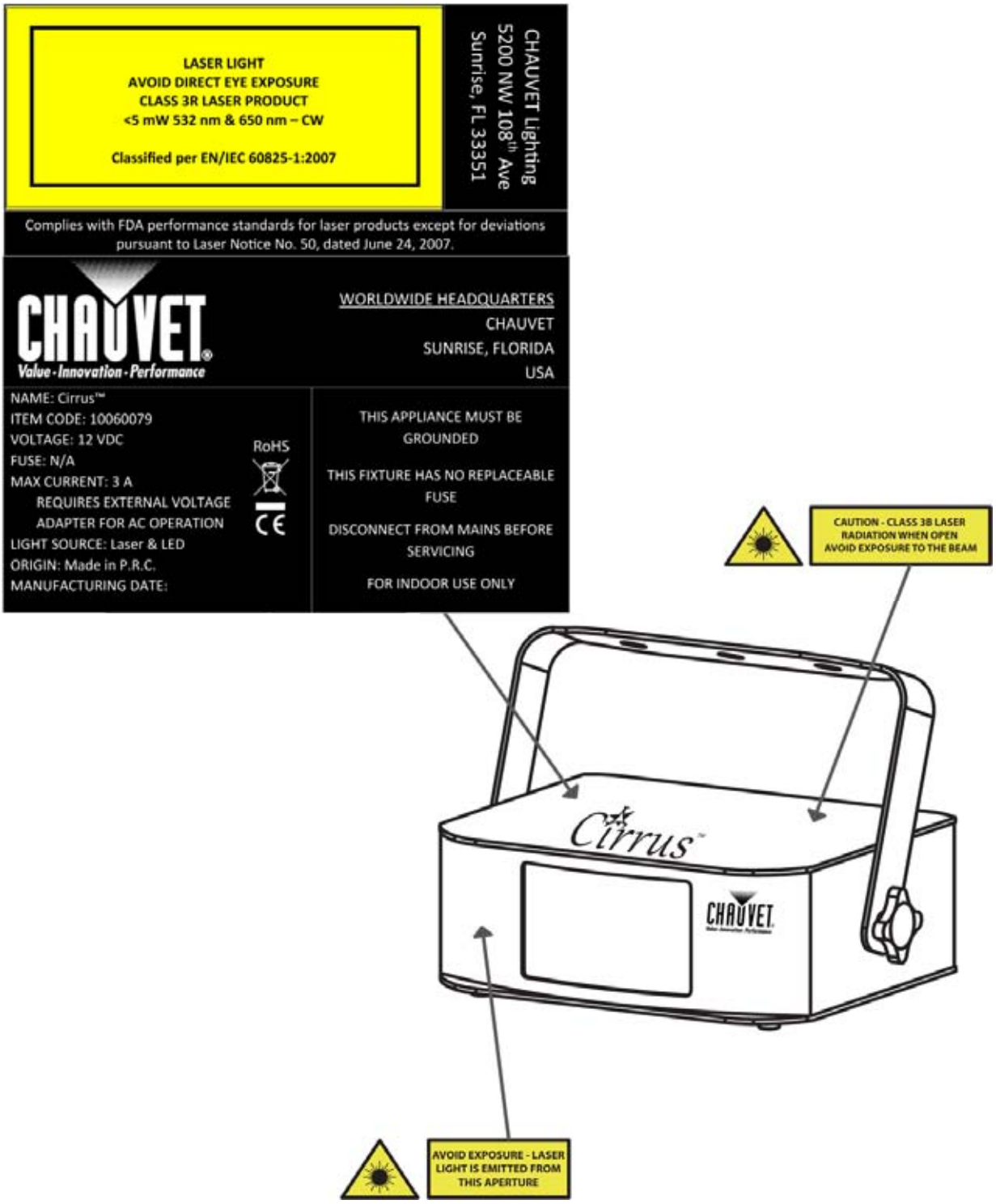
Laser Light is different from any other light sources with which you may be familiar. The light from this product can potentially cause eye injury if not set up and used properly. Laser light is thousands of times more concentrated than light from any other kind of light source. This concentration of light can cause instant eye injuries, primarily by burning the retina (the light sensitive portion at the back of the eye). Even if you cannot feel "heat" from a laser beam, it can still potentially injure or blind you or your audience. Even very small amounts of laser light are potentially hazardous even at long distances. Laser eye injuries can happen quicker than you can blink.

It is incorrect to think that because these laser entertainment products split the laser into hundreds of beams that the laser beam is scanned out in high speed, that an individual laser beam is safe for eye exposure. This laser product uses dozens of milliwatts of laser power (Class 3B levels internally) before it splits into multiple beams (Class 3R levels). Many of the individual beams are potentially hazardous to the eyes.

It is also incorrect to assume that because the laser light is moving, it is safe. This is not true. Nor, do the laser beams always move. Since eye injuries can occur instantly, it is critical to prevent the possibility of any direct eye exposure. In the laser safety regulation, it is not legal to aim Class 3R lasers in areas which people can get exposed. This is true even if it is aimed below people's faces, such as on a dance floor.

- Do not operate the laser without first reading and understanding all safety and technical data in this manual.
- Always set up and install all laser effects so that all laser light is at least 3 meters (9.8 feet) above the floor on which people can stand. See "Proper Usage" section later in this manual.
- After set up, and prior to public use, test laser to ensure proper function. Do not use if any defect is detected. Do not use if laser emits only one or two laser beams rather than dozens/hundreds, as this could indicate damage to the diffraction grating optic, and could allow emission of higher laser levels above Class 3R.
- Do not point lasers at people or animals.
- Never look into the laser aperture or laser beams.
- Do not point lasers in areas in which people can potentially get exposed, such as uncontrolled balconies, etc.
- Do not point lasers at highly reflective surfaces, such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.
- Never point a laser at aircraft, this is a federal offense.
- Never point un-terminated laser beams into the sky.
- Do not expose the output optic (aperture) to cleaning chemicals.
- Do not use laser if the laser appears to be emitting only one or two beams.
- Do not use the laser if the housing is damaged, open, or if the optics appear damaged in any way.
- Never open the laser housing. The high laser power levels inside of the protective housing can start fires, burn skin and will cause instant eye injury.
- Never leave this device running unattended.
- The operation of a class 3R laser show is only allowed if the show is controlled by a skilled and well-trained operator, familiar with the data included in this manual.
- The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.
- Always use appropriate lighting safety cables when hanging lights and effects overhead.

Laser Safety Label Reproduction


LASER LIGHT
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT
<5 mW 532 nm & 650 nm – CW
Classified per EN/IEC 60825-1:2007
CHAUVET Lighting
5200 NW 108th Ave
Sunrise, FL 33351
Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.
CHAUVET
Value · Innovation · Performance
WORLDWIDE HEADQUARTERS
CHAUVET
SUNRISE, FLORIDA
USA
NAME: Cirrus™
ITEM CODE: 10060079
VOLTAGE: 12 VDC
FUSE: N/A
MAX CURRENT: 3 A
REQUIRES EXTERNAL VOLTAGE ADAPTER FOR AC OPERATION
LIGHT SOURCE: Laser & LED
ORIGIN: Made in P.R.C.
MANUFACTURING DATE:
RoHS
CE
THIS APPLIANCE MUST BE GROUNDED
THIS FIXTURE HAS NO REPLACEABLE FUSE
DISCONNECT FROM MAINS BEFORE SERVICING
FOR INDOOR USE ONLY
CAUTION - CLASS 3B LASER RADIATION WHEN OPEN AVOID EXPOSURE TO THE BEAM
Cirrus™
CHAUVET
AVOID EXPOSURE - LASER LIGHT IS EMITTED FROM THIS APERTURE

LASER EXPOSURE

Laser light - Avoid direct eye contact!

Further guidelines and safety programs for safe use of lasers can be found in the ANSI Z136.1 Standard “For Safe Use of Lasers”, available from the Laser Institute of America: www.laserinstitute.org. Many local governments, corporations, agencies, military and others, require all lasers to be used under the guidelines of ANSI Z136.1. Laser Display guidance can be obtained via the International Laser Display Association: www.laserist.org.

Laser Emission Data

Laser Classification	Class 3R
Green Laser Medium	DPSS Nd:YVO4, 532 nm
Red Laser Medium	GaAlAs diode laser 650 nm, typical
Pulse Data	All pulses < 4 Hz (>0.25 sec)
Divergence (total light)	<160 degrees
Laser Power of output from Aperture*	<5 mW

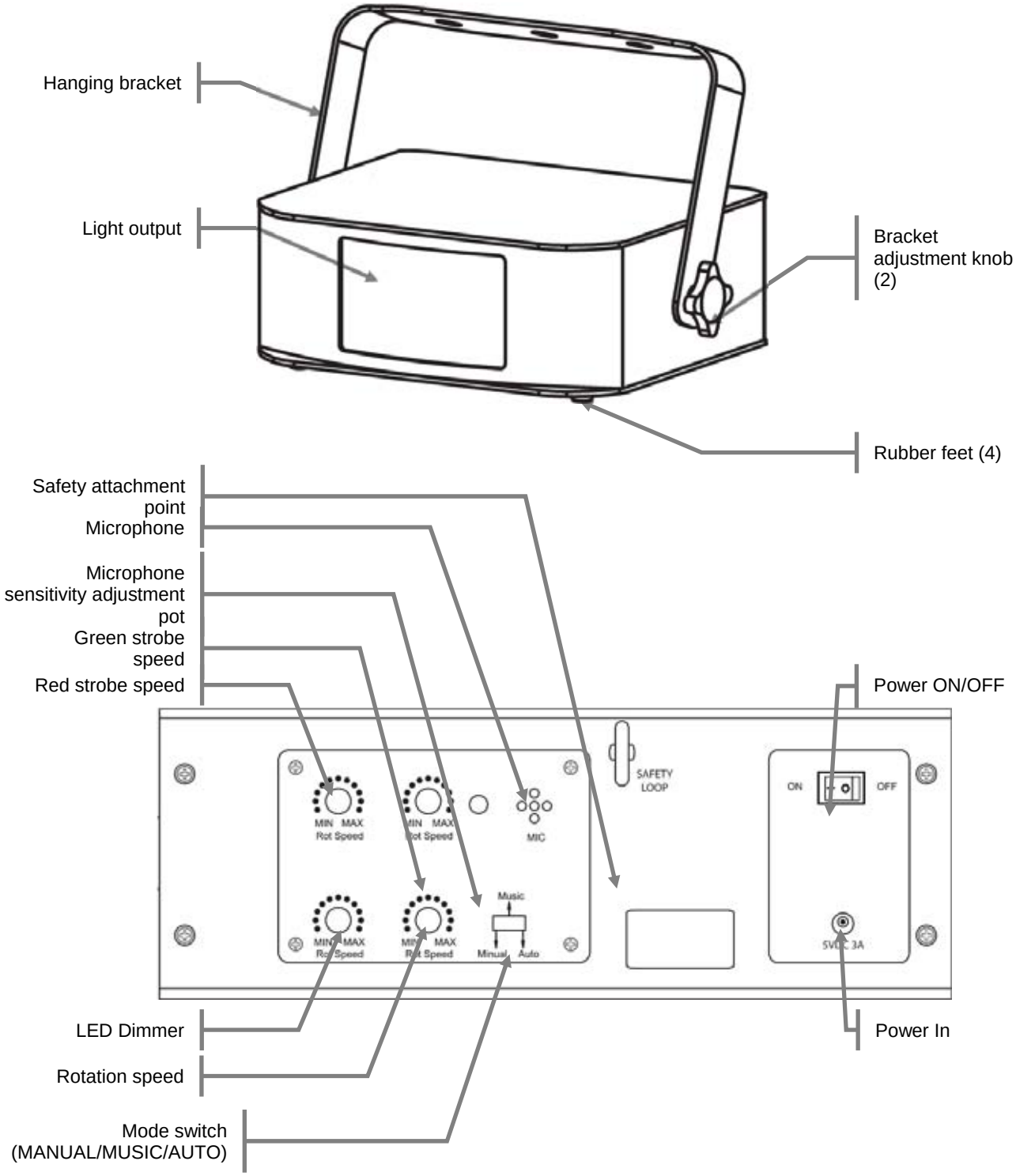
*As measured under IEC measurement conditions for classification.

Laser Compliance Statement

This laser product complies with EN/IEC 60825-1 Ed 2, 2007-03, and US FDA/CDRH FLPPS via the terms of Laser Notice No. 50 dated June 24, 2007. This laser device is classified 3R. (Class 3R is the international equivalent of US Class IIIa). No maintenance is required to keep this product in compliance with laser performance standards.

2. INTRODUCTION

Product Overview



3. SETUP

AC Power

Power Supply

This product requires an external power supply, which is included. The included power supply is rated for an input of 100~240 VAC, 50/60 Hz, and an output of 5 V, 3 A.

Before powering on the unit, make sure the line voltage to which you are connecting it is within the range of accepted voltages. Only use the included power supply! To obtain a replacement power supply, contact Chauvet®.

To determine the power requirements for a particular product, see the label affixed to the back plate of the product or refer to the product's specifications chart. A product's listed current rating indicates the average current draw under normal conditions.

Always connect the product to a switched circuit. Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used only as a 0 to 100% switch.

Mounting

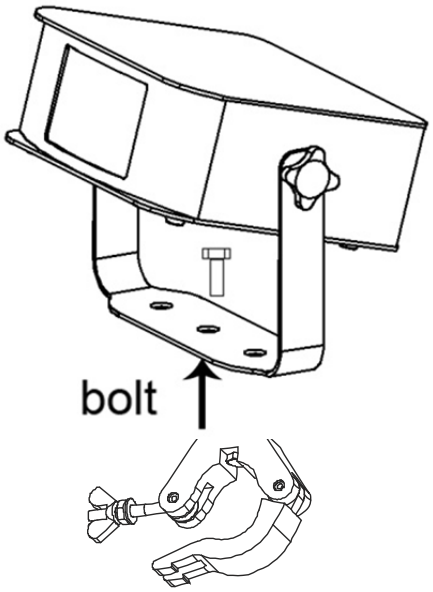
Orientation

This product may be mounted in any safe position, provided there is adequate room for ventilation.

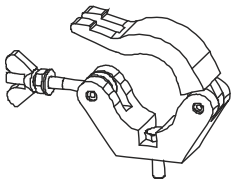
Rigging

It is important never to obstruct the fan or vents pathway. Mount the product using, a suitable "C" or "O" type clamp. Adjust the angle of the product by loosening both knobs and tilting the product. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration access and routine maintenance.
- Safety cables must always be used.
- Never mount in places where the product will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.
- Do not use any tool on the bracket adjustment knob. Hand-tighten only!



Hanging Clamp

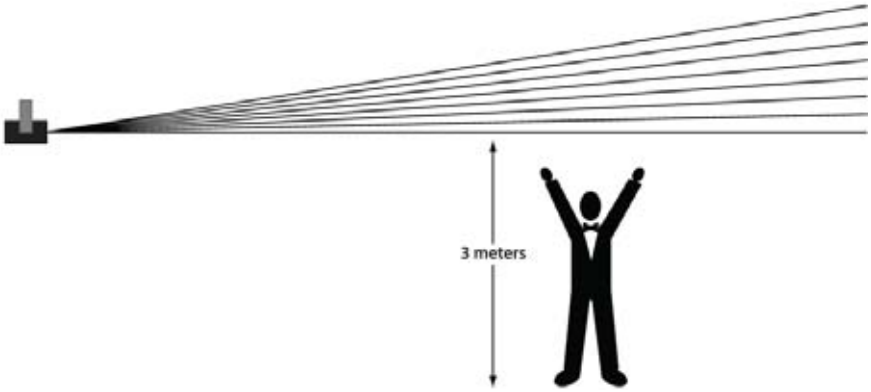


Note!
Clamp is sold separately.

Proper Usage

This product is for overhead mounting only. For safety purposes, CHAUVET® recommends mounting your lighting effect products on steady elevated platforms or sturdy overhead supports using suitable hanging clamps. In all cases, you must use safety cables. You can obtain appropriate mounting hardware from your lighting vendor.

International laser safety regulations require that laser products must be operated in the fashion illustrated below, with a minimum of 3 meters (9.8 ft) of vertical separation between the floor and the lowest laser light vertically. Additionally, 3 meters of horizontal separation is required between laser light and audience or other public spaces.



CAUTION - USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE

4. OPERATION

Sound-Active

This product has a sound-active mode. This means that the triggering for the built-in program will respond to the built-in microphone. Please see the instructions below for further explanation.

1. Plug the product into power.
2. Turn the power switch to the ON position.
3. Turn the mode switch to the MUSIC position.
4. Adjust the sound sensitivity pot with a suitable flat-head screw driver.

	• **The DIMMER adjustment knob controls solely the blue LED, NOT either laser.** • **The DIMMER adjustment and ROTATION SPEED adjustment controls will function in this mode. However, they will work along with the program, which means that any adjustments will only work when the program sets the LED and lasers to ON.**
	• **Use caution when adjusting the microphone sensitivity. Failure to do so may cause damage to the product or harm to the user.**
	• **The DIMMER adjustment knob controls solely the blue LED, NOT either laser.** • **All of the adjustment knobs will function in this mode.** • **Turn the RED & GREEN STROBE adjustment knobs clockwise to reduce the strobe rate to constant output.** • **The lasers will not turn off if the RED & GREEN STROBE adjustment knobs are turned completely counterclockwise. They will continue to strobe slowly.**

Manual

This product has a manual mode. This means that the user will have control over each individual function of the product, using the controls on the back panel. Please see the instructions below for further explanation.

1. Plug the product into power.
2. Turn the power switch to the ON position.
3. Turn the mode switch to the MANUAL position.
4. Combine the 4 knob adjustments to achieve the desired effect.

AUTO

This product has an automatic mode. This means that the triggering for the built-in program will progress at a constant speed, which is not adjustable. Please see the instructions below for further explanation.

1. Plug the product into power.
2. Turn the power switch to the ON position.
3. Turn the mode switch to the AUTO position.

	• **The DIMMER adjustment knob controls solely the blue LED, NOT either laser.** • **The DIMMER adjustment and ROTATION SPEED adjustment controls will function in this mode. However, they will work along with the program, which means that any adjustments will only work when the program sets the LED and lasers to ON.**

5. APPENDIX

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RMA #). Products returned without an RMA # will be refused. Call CHAUVET® and request RMA # prior to shipping the product. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack product, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET® reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA #, please include the following information on a piece of paper inside the box:

1. Your name
2. Your address
3. Your phone number
4. The RMA #
5. A brief description of the symptoms

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a product is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

General Troubleshooting

Symptom	Solution(s)	Applies to			
		Lights	Foggers & Snow	Controllers	Dimmers & Chaser
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check user manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓		✓	✓
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	✓	✓
No laser output	Bounce mirror motor may have shifted during shipping; readjust	✓			

If you still have a problem after trying the above solutions, please contact CHAUVET® Technical Support.

Contact Information

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General Information

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Toll free: (800) 762-1084

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United Kingdom & Ireland

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Voice: +44 (0)1773 511115
Fax: +44 (0)1773 511110
Email: uktech@chauvetlighting.com

Technical Specifications

Power Supply

WEIGHT & DIMENSIONS

Length	7.4 in (188 mm)
Width	10.3 in (261 mm)
Height	6 in (175 mm)
Weight	3.6 lbs (1.6 kg)

POWER

External power supply (cETLus)	5 VDC, 3 A
Power consumption @ 120 V	15 W (0.2 A) max
Inrush current @ 120 V	0.2 A
Power consumption @ 230 V	15 W (0.1 A) max
Inrush current @ 230 V	0.2 A

LASERS

Green laser	532 nm, 30 mW
Red laser	650 nm, 80 mW
Laser Type	Diode & DPSS
Cooling	Fan Cooled

LED

Deep blue	450 nm
Quantity	1 x 5 W

PHOTO OPTIC

Coverage Angle	76°

THERMAL

Maximum ambient temperature	104° F (40° C)

ORDERING INFORMATION

Cirrus™	CIRRUS

WARRANTY INFORMATION

Product Warranty (excluding laser diode)	1-year limited warranty
Laser Diode Warranty	90-day limited warranty